

20 DEC 2004

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
31 December 2003 (31.12.2003)

PCT

(10) International Publication Number
WO 2004/001392 A1

(51) International Patent Classification⁷: **G01N 13/00**,
29/02

(21) International Application Number:
PCT/SE2003/001038

(22) International Filing Date: 18 June 2003 (18.06.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/389,492 19 June 2002 (19.06.2002) US
0201877-8 19 June 2002 (19.06.2002) SE
0201876-0 19 June 2002 (19.06.2002) SE
60/389,493 19 June 2002 (19.06.2002) US

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(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC,
SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG,
US, UZ, VC, VN, YU, ZA, ZM, ZW.

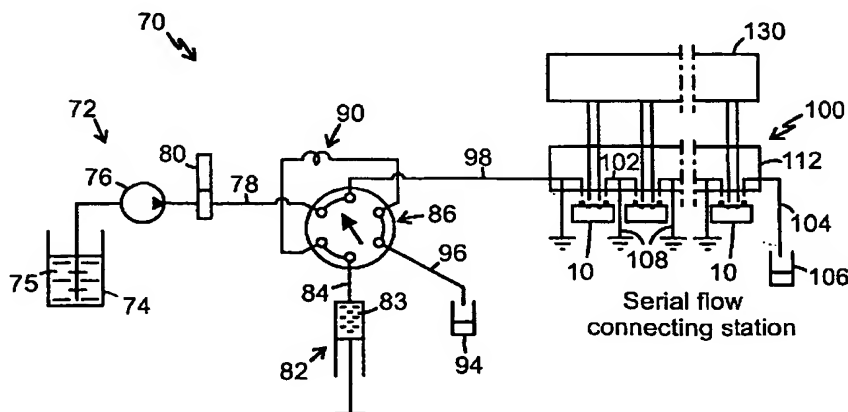
(84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

[Continued on next page]

(54) Title: SYSTEM, DEVICE AND METHOD FOR DETECTION OF SEVERAL INDIVIDUAL ANALYTES IN A SOLUTION, AND A DISPOSABLE FLOW CELL FOR USE THEREIN



(57) **Abstract:** A system, device and method for detection of several individual analytes in a test solution aliquot (83) with an array of individually operated piezoelectric crystal microbalances are described. The system comprises a connecting station (100) that receives a plurality of individually specific piezoelectric crystal microbalance flow-trough cells (10), each containing a piezoelectric crystal (50) carrying electrodes (56, 62) and a coating (66, 46) exposing a first member of an interaction pair specific for an individual analyte being a second member of the interaction pair. Flowing means (70) flows a solution (75) and the test solution aliquot (83) to and through a cell compartment of each of the cells (10) via the connecting station (100). Power and measurement means (130) oscillate the piezoelectric crystal(s) (50). A change in oscillating characteristics of the crystal(s) (50), following interaction between the first and second members of the interaction pair, detects presence of the individual analyte(s). Further, disposable flow cells (10) for use in an array of individually operated piezoelectric crystal microbalances (112) is described.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 03/01038

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: G01N 13/00, G01N 29/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Y		24,26-34
A		6-8,10-14,25
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X	US 6196059 B1 (C.KÖSSLINGER ET AL), 1 March 2001 (01.03.01), column 8, line 49 - line 55; column 6, line 17 - line 28	22-23
Y		24,26-34
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A	US 5494639 A (A.GRZEGORZEWSKI), 27 February 1996 (27.02.96), abstract	1-34
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☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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Date of the actual completion of the international search

4 Sept 2003

Date of mailing of the international search report

09 -09- 2003

Name and mailing address of the ISA/

Swedish Patent Office

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 03/01038

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5945774 A (MING-CHANG CHIH ET AL), 31 August 1999 (31.08.99), abstract --	1-34
A	US 5977687 A (GLENN M.TOM ET AL), 2 November 1999 (02.11.99), abstract -- -----	1-34

INTERNATIONAL SEARCH REPORT
Information on patent family members

26/07/03

International application No.

PCT/SE 03/01038

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